Claims

1. Method for determining the phase position of a camshaft of an internal combustion engine with a crankshaft (21), a camshaft (36) and a setting mechanism (37) by means of which the phase position (PH) of the camshaft (21) can be adjusted in relation to the crankshaft (37),
characterized in that

- the phase position (PH) is determined in accordance with a detected crankshaft angle (CRK) and a recorded camshaft angle (CRM),
- a filter coefficient (FF3) of a filter is determined in accordance with the amplitude (AMP) of an oscillation of the phase position (PH) and the modification (DELTA) of said phase position (PH) and
- a filtered phase position (PH_FIL) of the determined phase position (PH) is determined by using the filter.

2. Method according to claim 1,
characterized in that
filtering takes place by means of a non-recursive filter of the first order.

3. Method according to claim 1,
characterized in that
the modification (DELTA) of the phase position (PH) is filtered and the filter coefficient (FF3) is determined in accordance with the filtered modification (DELTA_FIL) of said phase position (PH).

4. Method according to claim 3,
characterized in that
the modification (DELTA) of the phase position (PH) is filtered in accordance with the rotation (N) and/or an oil temperature (TOIL).

5. Method according to one of the previous claims, characterized in that the amplitude (AMP) of the oscillation of the phase position (PH) is filtered and the filter coefficient (FF3) is determined in accordance with the filtered amplitude (AMP_FIL) of the oscillation of the phase position (PH).

6. Method according to claim 5, characterized in that the amplitude (AMP) is filtered in accordance with the rotation (N) and/or the oil temperature (TOIL).

7. Method according to one of the previous claims, characterized in that the reducing of the filter coefficient (FF3) within a predetermined moment in time or within a predetermined crankshaft angle section is limited to a predetermined threshold value (SW).

8. Method according to one of the previous claims, characterized in that filtering is undertaken by means of a non-recursive filter of the first order.

9. Device for determining the phase position of a camshaft of an internal combustion engine with a crankshaft shaft (21), a camshaft (36) and a setting mechanism (37) by means of which the phase position (PH) of the camshaft (36) can be adjusted in relation to the crankshaft (21), characterized in that

- first means are provided which determine the phase position (PH) in accordance with a detected crankshaft angle (CRK) and a recorded camshaft angle (CAM),
- second means are provided which determine a filter coefficient (FF3) of a filter in accordance with the

amplitude (AMP) of an oscillation of the phase position (PH) and the modification (DELTA) of said phase position (PH), and

- third means are provided which determine a filtered phase position (PH_FIL) of the determined phase position (PH) by using the filter.